

EXHIBIT A


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Surface Modification Capabilities

Cabot's core capabilities include our silica and our patented carbon surface modification technologies. Both of these technologies are based on chemically attaching organic functional groups to our fine particles.

In addition to manipulating particle composition and morphology, we also have the unique ability to vary surface chemistry and control how particles perform in a variety of applications.

Here's how this capability extends the functionality of carbon black and fumed silica:

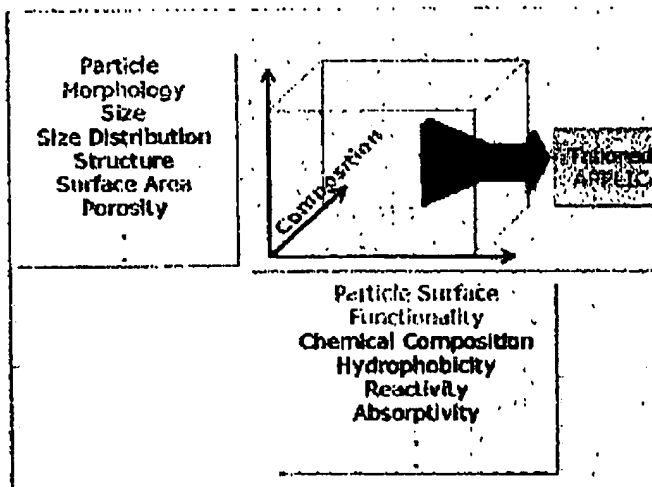
- Carbon black is inherently hydrophobic. However, Cabot's patented carbon surface modification technology allows us to make hydrophilic carbon black particles, the foundation of our highly successful Inkjet Colorants business. Our pigment dispersions deliver performance superior to traditional pigment dispersions or dye technologies, including: greater optical density, enhanced lightfast and smearfast properties, and sharper resolution of printed images.

The flexibility of this disruptive technology is enabling us to move into emerging markets such as fuel cells, flat panel displays and low cost printable electronics.

- Fumed silica is inherently hydrophilic. By treating the surface of silica, Cabot manufactures a wide variety of hydrophobic fumed sil that deliver performance benefits including: reduced moisture adsorption; effective rheology control in systems where untreated fumed silica particles fail; and increased compatibility with organic systems.

In addition, our expertise with the surface modification of silica has allowed us to revolutionize the manufacture of silica aerogels, & launch our Nanogel® Aerogel business. Because of their distinguishing optical and thermal properties, Nanogel Aerogels are prime in architectural lighting (daylighting) and insulation applications.

We are capitalizing on our deep knowledge of silica surface chemistry to continue the development of new treated grades that deliver enhanced performance in toners, adhesives, coatings and other markets.



For an interactive look at the chemistry and functionality of Cabot's carbon black and fumed silica products, please visit our interactive modules.

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